

FIG.1A

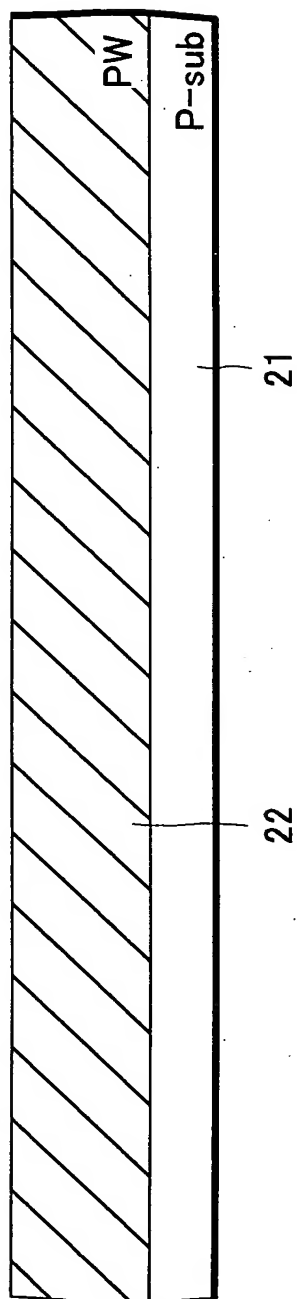


FIG.1B

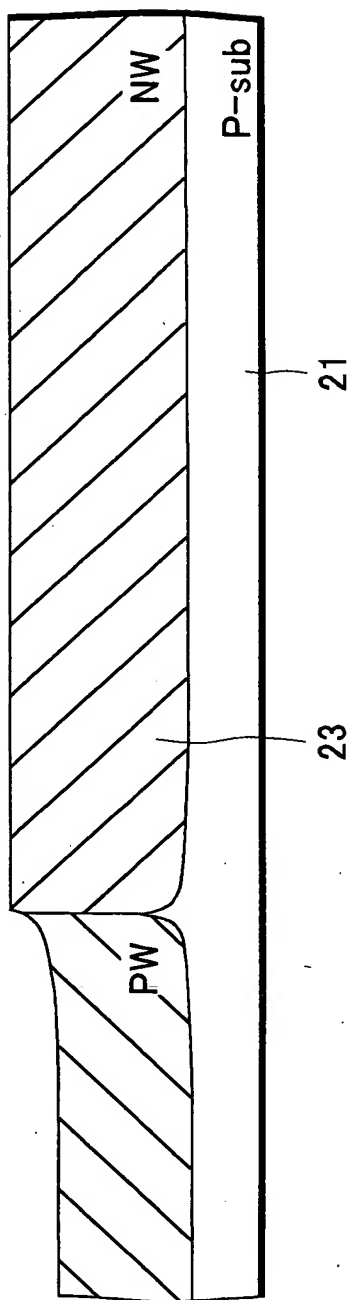
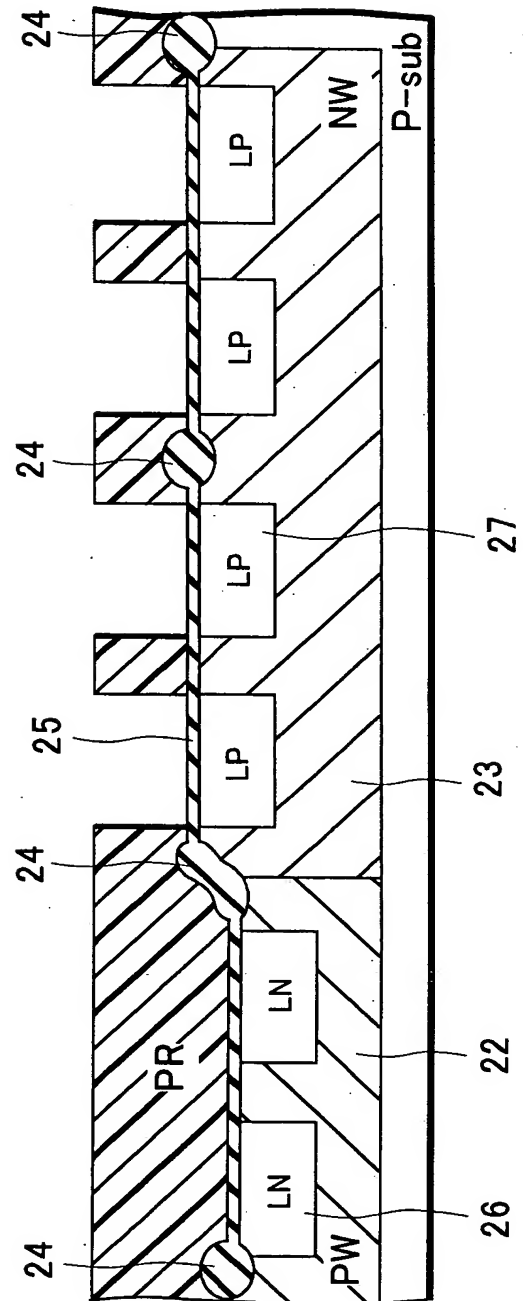


FIG. 2B



This diagram shows a cross-sectional view of a semiconductor device. A central vertical line represents a PN junction, with alternating shaded and unshaded regions on either side. The shaded regions are labeled 'LN' (likely n-type layer) and the unshaded regions are labeled 'P-sub' (P-type substrate). The device is bounded by a top layer labeled 'PW' (passivation) and a bottom layer labeled 'PR' (photoresist). The diagram includes numerical labels 24, 25, and 26, which likely correspond to specific layers or regions in the device structure.

[illegible]

FIG.4A

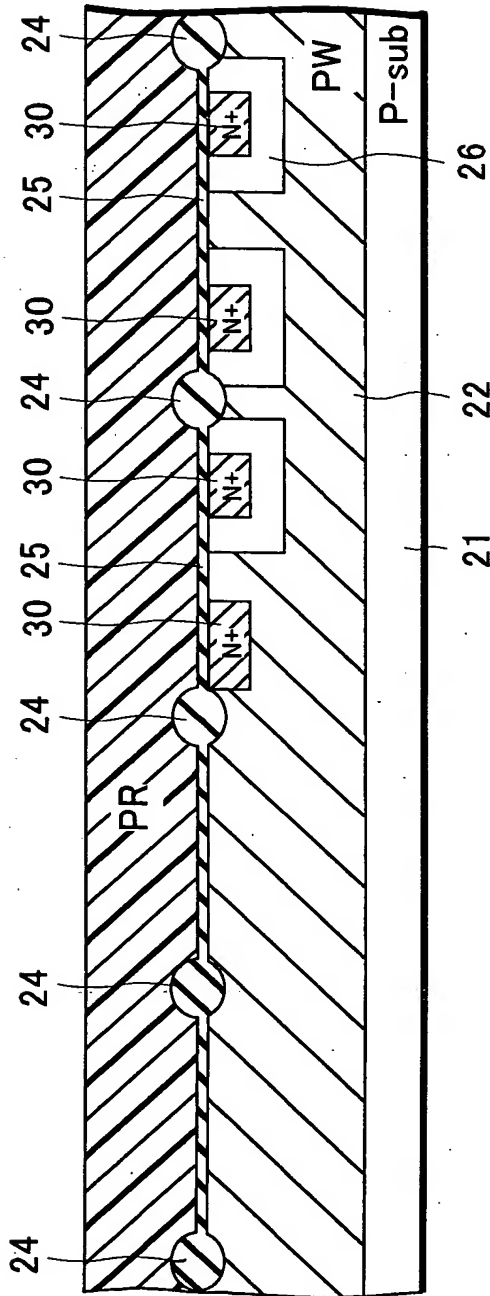
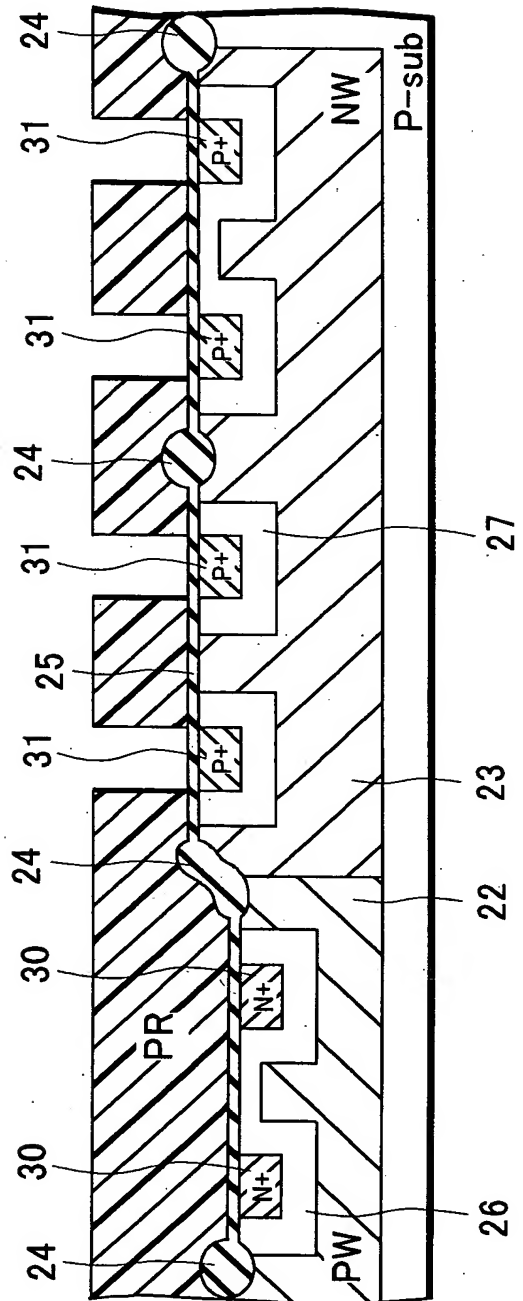


FIG.4B



This cross-sectional view shows a semiconductor device with a substrate 26. A series of gates 27 are formed on the surface, with regions 28 and 29 between them. Contacts 30 and 31 are provided for the gates. A region 32 is located beneath the gates, and a region 33 is at the bottom. Labels include PR, PW, NW, P+, N+, and P-sub.

FIG.6A

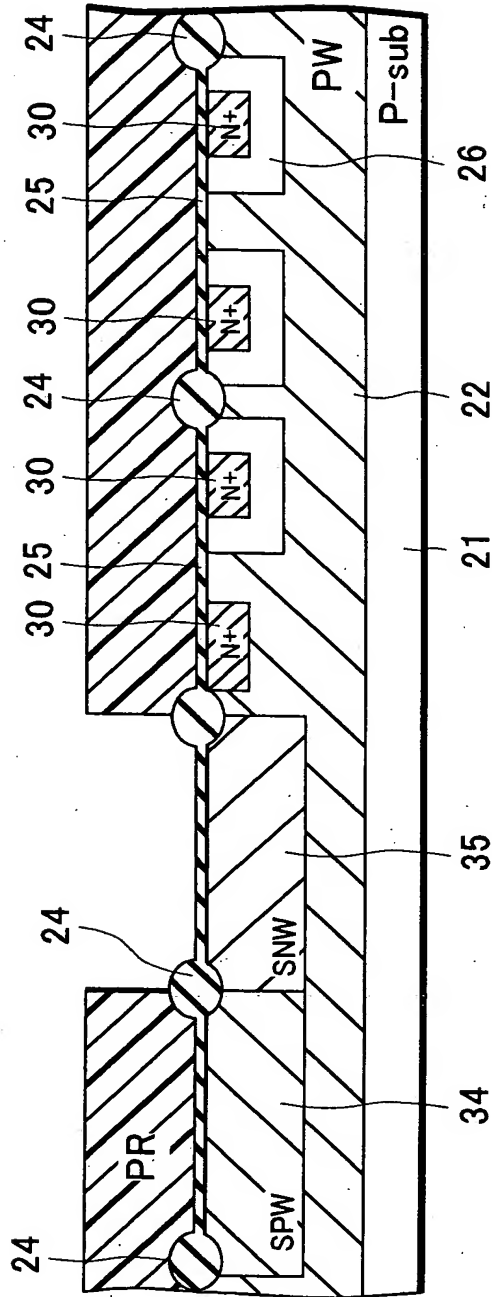


FIG.6B

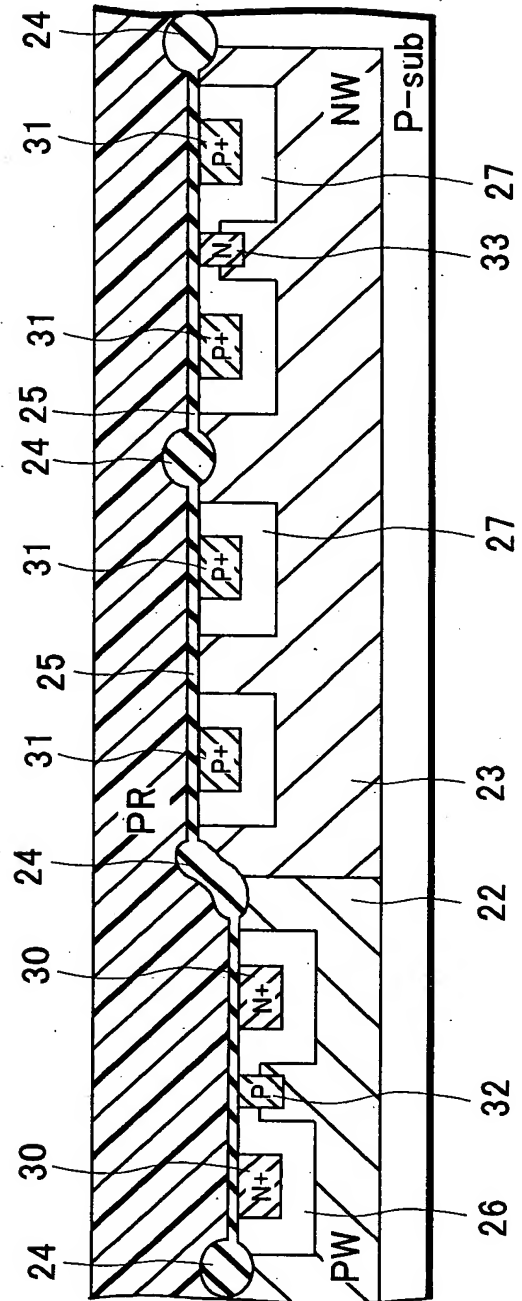


FIG. 7A

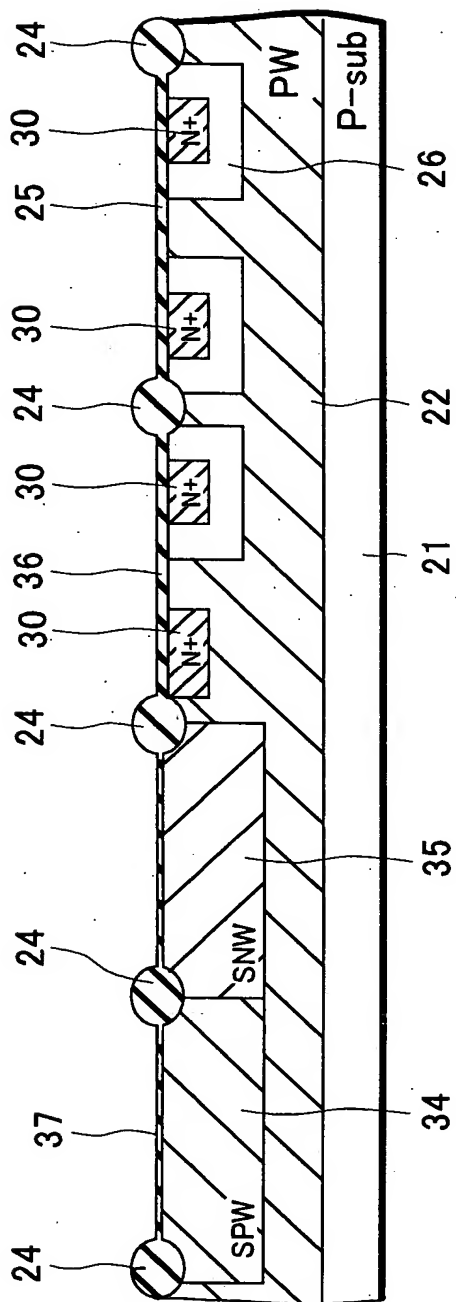


FIG. 7B

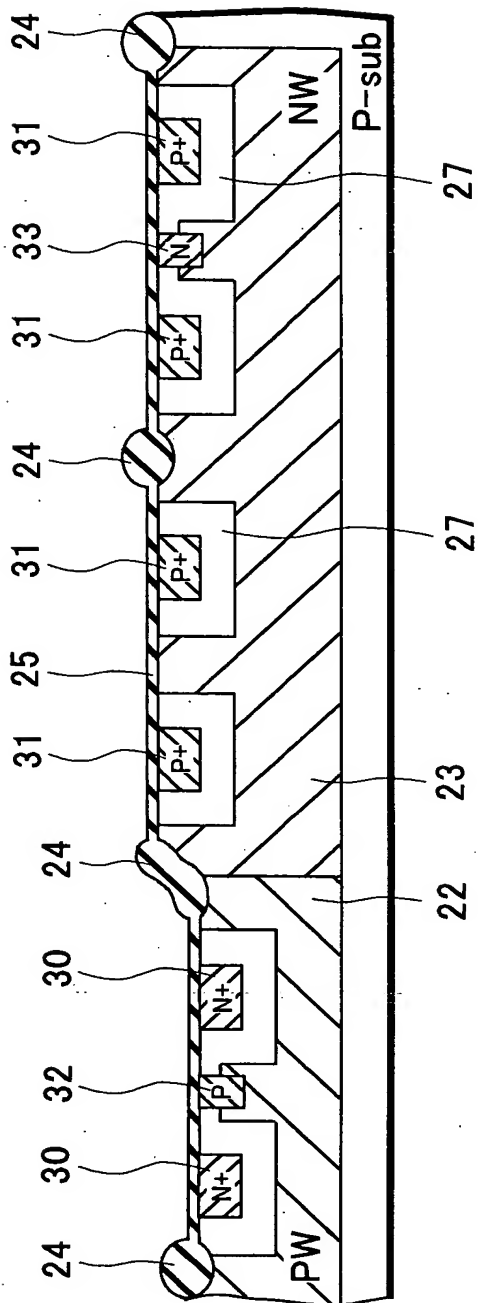


FIG. 8A

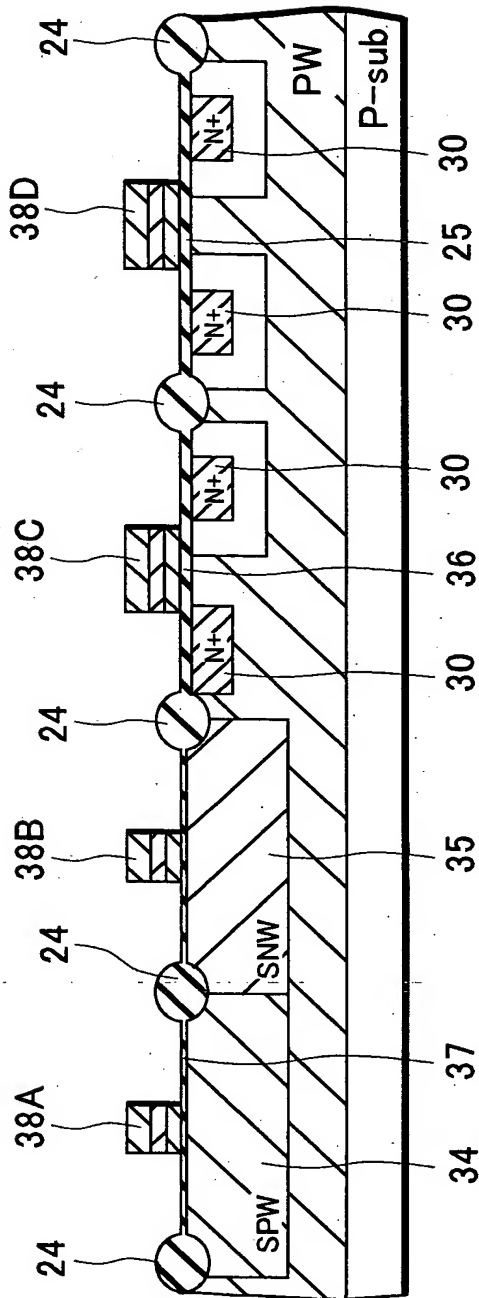


FIG. 8B

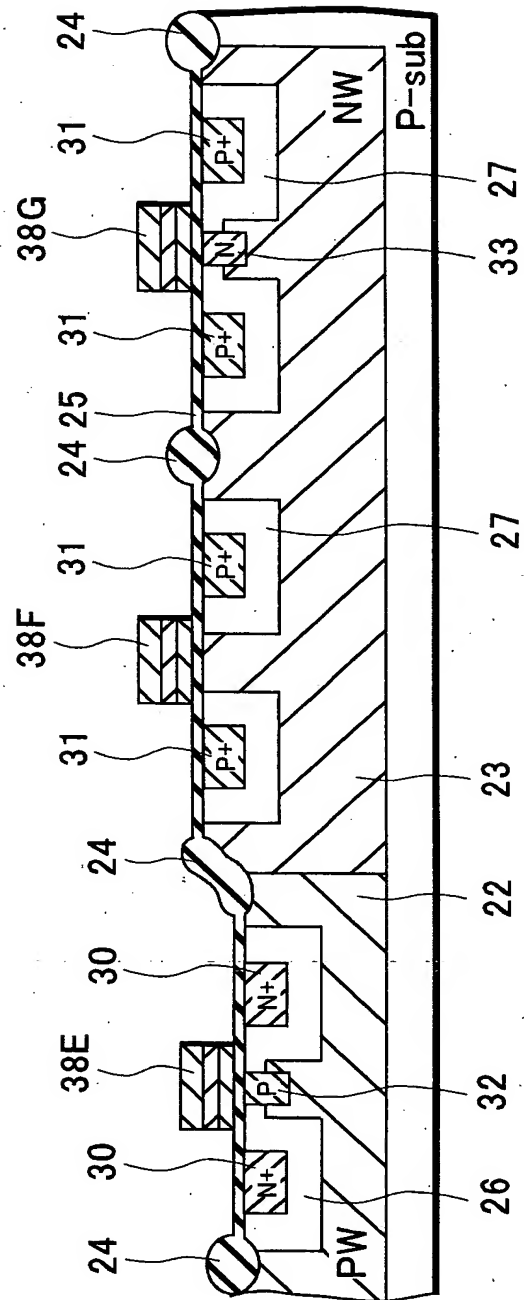


FIG.9A

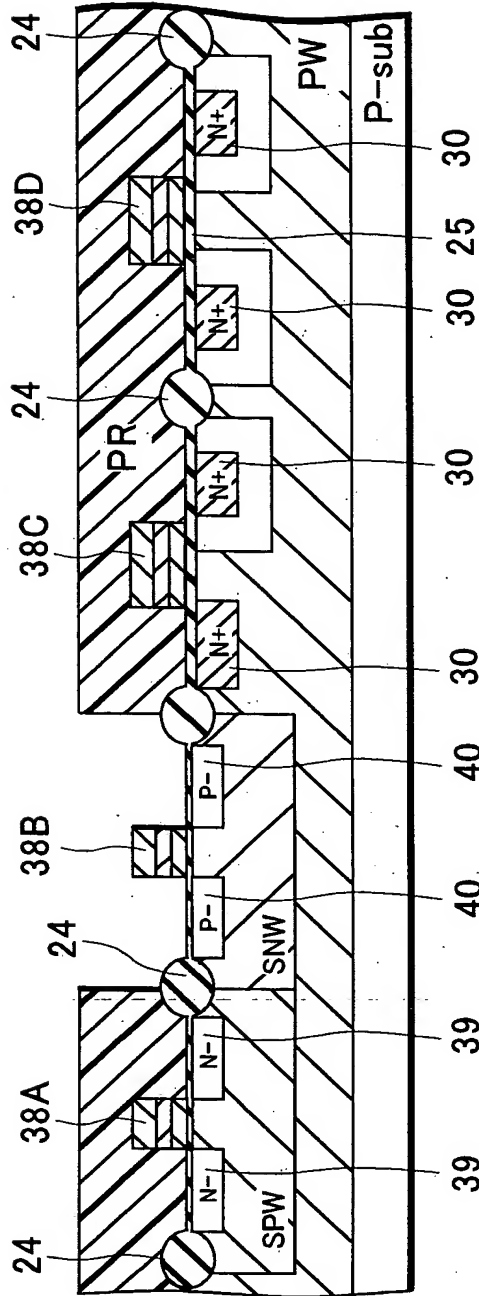
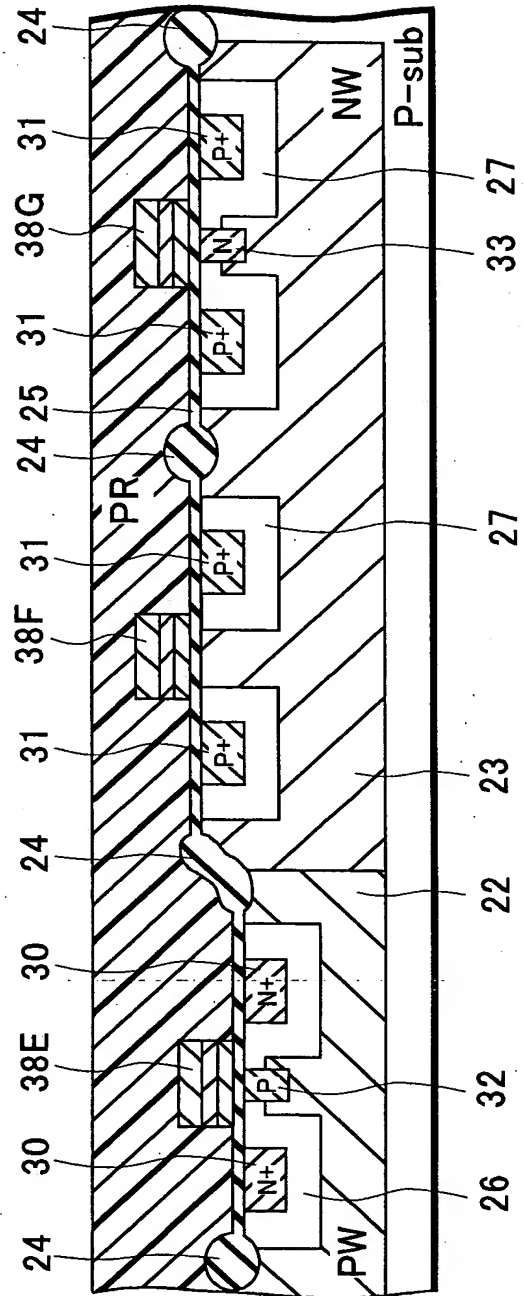


FIG.9B



This cross-sectional view shows a semiconductor device with a substrate 24. The device features a series of gates labeled 38A, 38B, 38C, and 38D. Contacts 41A and 41 are positioned between the gates. Various doped regions are indicated: N+ (42, 39, 42), P+ (43, 40), and P-sub (44). Specific regions are labeled SPW, SNW, and PW. The diagram illustrates the complex layering and doping profile of the device.

This diagram shows a cross-sectional view of a semiconductor device. A central channel, labeled 22, is formed in a substrate, indicated by a diagonal hatching pattern. The channel is defined by a series of gates or barriers, labeled 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41. The gates are arranged in a periodic fashion along the length of the channel. The gates are labeled with various dopant concentrations: P+ (P-type, heavy doping), N+ (N-type, heavy doping), and NW (N-type, work function). The gates are also labeled with PR (P-type, resistive) and PW (P-type, work function). The gates are connected to a common line, labeled 27, which runs along the length of the device. The gates are also connected to a common line, labeled 27, which runs along the length of the device. The gates are also connected to a common line, labeled 27, which runs along the length of the device.

FIG. 11A

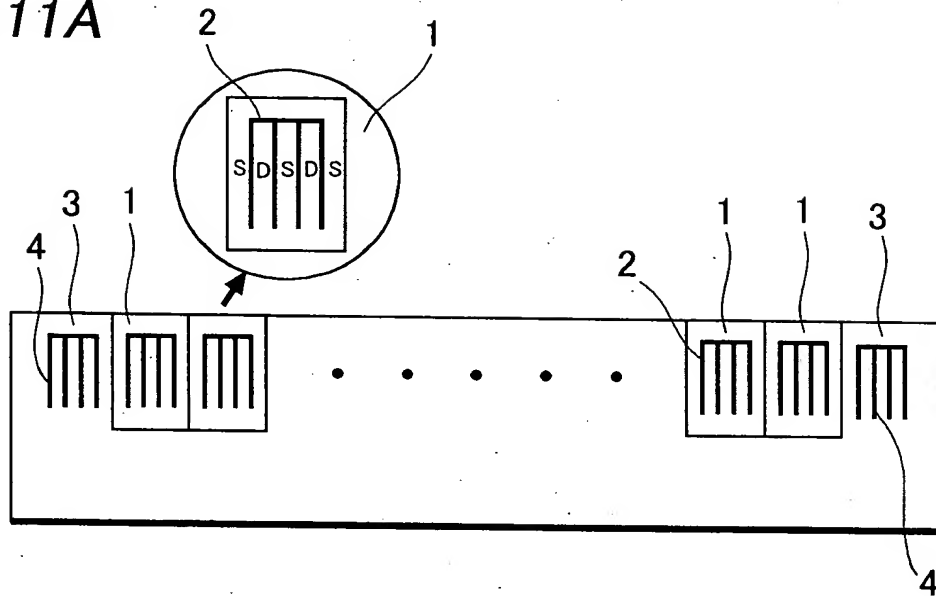


FIG. 11B

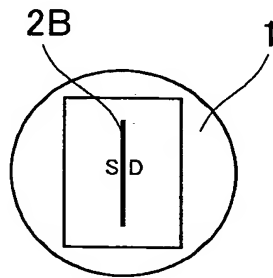


FIG. 11C

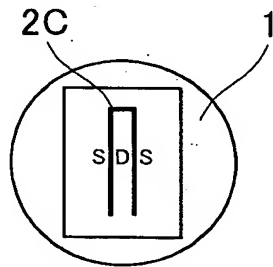


FIG. 11D

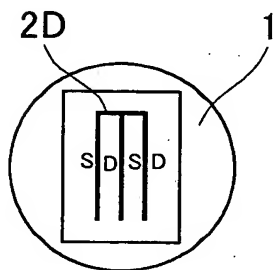


FIG. 12

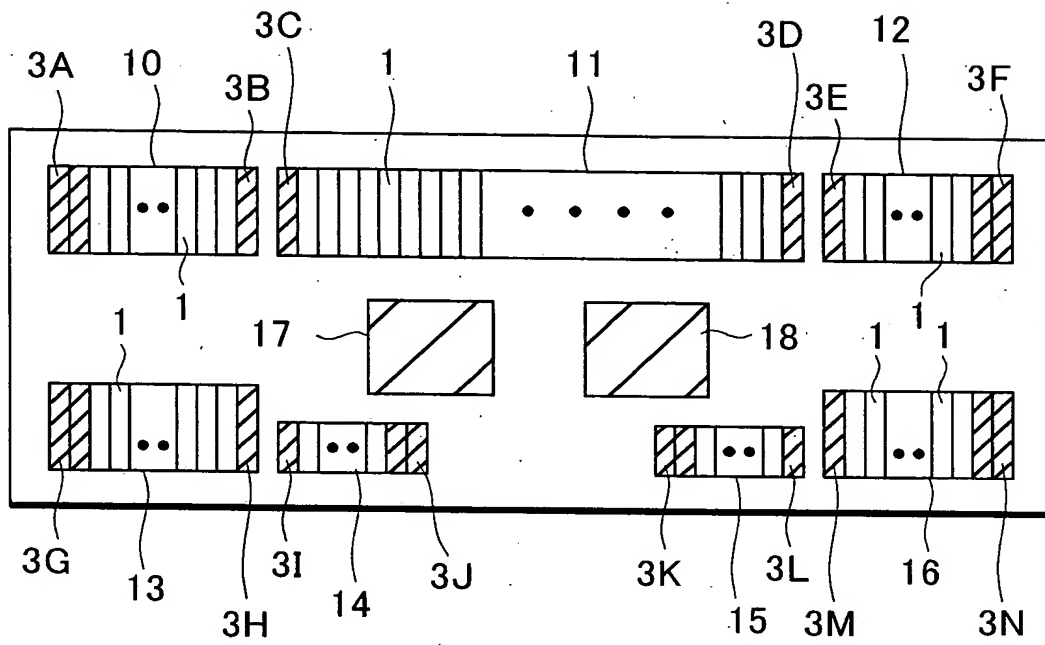


FIG. 13

